

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,274,331 B2
APPLICATION NO. : 10/502413
DATED : September 25, 2007
INVENTOR(S) : Markus Heiniger et al.

Page 1 of 5

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Title page of the Patent: Item (54) and col. 1, line 1-4 "PHASE-SHIFTING SYSTEM USING A DISPLACEABLE DIELECTRIC AND PHASE ARRAY ANTENNA COMPRISING SUCH A PHASE-SHIFTING SYSTEM" should read
-- PHASE-SHIFTING SYSTEM AND ANTENNA FIELD COMPRISING SUCH A PHASE-SHIFTING SYSTEM --

Column 1, after line 12 and before "2. Description of Related Art", insert the following paragraph: -- Such a phase shifter arrangement or such an antenna array is disclosed, for example, in the document US-B1-6,310,585. --

Column 1, line 65, delete [[(40 in FIG. 1; 440 in FIG.3)]]

Column 1, line 67, bridging Column 1, line 1, delete [[(column 3, lines 65-65; column 5, lines 1-18)]]

Column 2, line 10, delete [[(415 in FIG. 3)]]

Column 2, line 12, delete [[(420 in FIG. 3)]]

Column 2, after the title, "SUMMARY OF THE INVENTION", delete the paragraph from lines 25-29 and insert therefor the following paragraph:
-- It is therefore the object of the invention to develop a phase shifter arrangement of the type mentioned initially such that the disadvantages of the known phase shifter arrangements are avoided, and such that, in particular, the design is simplified and the desired functionality is reliably achieved, as well as to specify an antenna array having such a phase shifter arrangement. --

Column 3, line 16, "Particularly" should read -- A particular --

Column 4, line 5, after "fact that" insert -- $2n+1$ ($n=1,2,2, \dots$) --

Column 4, line 5, after "antenna array", delete [[$2n+1$ ($n=1,2,2, \dots$)]]

Column 4, after line 13 and before "DESCRIPTION OF THE DRAWINGS", insert the following paragraph: -- Further embodiments are described hereinafter. --

Column 4, lines 43-44, "(FIGS. 9A and B)" should read -- (FIGS. 9A and 9B) --

Column 4, line 56, "106, . . . , 114" should read -- 106, 107, 108, 109, 110, 111, 112, 113 and 114 --

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,274,331 B2
APPLICATION NO. : 10/502413
DATED : September 25, 2007
INVENTOR(S) : Markus Heiniger et al.

Page 2 of 5

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 4, line 58, "106, . . . , 114" should read -- 106, 107, 108, 109, 110, 111, 112, 113 and 114 --

Column 4, line 59, "106a, b" should read -- 106a, 106b --

Column 4, line 61, "107, . . . , 114" should read -- 107, 108, 109, 110, 111, 112, 113 and 114 --

Column 4, line 62, "106a, b" should read -- 106a, 106b --

Column 4, line 66, "106, . . . , 114" should read -- 106, 107, 108, 109, 110, 111, 112, 113 and 114 --

Column 5, line 1, "106, . . . , 114" should read -- 106, 107, 108, 109, 110, 111, 112, 113 and 114 --

Column 5, line 1, "106a, b" should read -- 106a, 106b --

Column 5, line 3, "99a, b" should read -- 99a, 99b --

Column 5, line 5, "99a, b" should read -- 99a, 99b --

Column 5, line 7, "106, . . . , 114" should read -- 106, 107, 108, 109, 110, 111, 112, 113 and 114 --

Column 5, line 9, "91a, b, . . . , 98a, b" should read -- 91a, 91b, 92a, 92b, 93a, 93b, 94a, 94b, 95a, 95b, 96a, 96b, 97a, 97b, 98a, 98b --

Column 5, line 11, "91a, b, . . . , 98a, b" should read -- 91a, 91b, 92a, 92b, 93a, 93b, 94a, 94b, 95a, 95b, 96a, 96b, 97a, 97b, 98a, 98b --

Column 5, line 16, "91a, b, . . . , 98a, b" should read -- 91a, 91b, 92a, 92b, 93a, 93b, 94a, 94b, 95a, 95b, 96a, 96b, 97a, 97b, 98a, 98b --

Column 5, lines 20-21, "91a, b, . . . , 98a, b" should read -- 91a, 91b, 92a, 92b, 93a, 93b, 94a, 94b, 95a, 95b, 96a, 96b, 97a, 97b, 98a, 98b --

Column 5, line 21, "99a, b" should read -- 99a, 99b --

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,274,331 B2
APPLICATION NO. : 10/502413
DATED : September 25, 2007
INVENTOR(S) : Markus Heiniger et al.

Page 3 of 5

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 5, line 23, "91a, b, . . . , 94a, b" should read -- 91a, 91b, 92a, 92b, 93a, 93b, 94a, 94b --

Column 5, line 24, "99a, b" should read -- 99a, 99b --

Column 5, line 30, "99a, b" should read -- 99a, 99b --

Column 5, line 31, "106, . . . , 109 and 111, . . . , 114" should read -- 106, 107, 108, 109, and 111, 112, 113 and 114 --

Column 5, line 33, "91a, b, . . . , 98a, b" should read -- 91a, 91b, 92a, 92b, 93a, 93b, 94a, 94b, 95a, 95b, 96a, 96b, 97a, 97b, 98a, 98b --

Column 5, line 37, "99a, b" should read -- 99a, 99b --

Column 5, line 65, after "21, 22", insert -- (FIG. 2) --

Column 6, line 2, after "25, 26", insert -- (FIG. 2) --

Column 6, line 6, "61, . . . , 63" should read -- 61, 62, 63 --

Column 6, line 10, "81, . . . , 83" should read -- 81, 82, 83 --

Column 6, lines 10-11, "61, . . . , 63" should read -- 61, 62, 63 --

Column 6, line 13, after "slide 80" insert -- (FIG. 8) --

Column 6, line 16, after "slide 80" insert -- (FIG. 8) --

Column 6, line 21, after "lugs 25, 26" insert -- (FIG. 2) --

Column 6, line 35, "71, . . . , 73" should read -- 71, 72, 73 --

Column 6, line 37, "81, . . . , 83" should read -- 81, 82, 83 --

Column 6, line 41, "recesses 81, 82" should read -- recesses 84, 85 --

Column 6, line 47, "66a, c and 67a, c" should read -- 66a, 66c and 67a, 67c --

Column 6, line 49, "in FIG. 6, 5" should read -- in FIG. 6 --

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,274,331 B2
APPLICATION NO. : 10/502413
DATED : September 25, 2007
INVENTOR(S) : Markus Heiniger et al.

Page 4 of 5

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 6, line 50, "66d , . . . , h" should read -- 66d, 66e, 66f, 66g, 66h --

Column 6, line 54, "66d , . . . , h" should read -- 66d, 66e, 66f, 66g, 66h --

Column 6, line 58, "66d , . . . , h" should read -- 66d, 66e, 66f, 66g, 66h --

Column 6, line 59, "66d , . . . , h" should read -- 66d, 66e, 66f, 66g, 66h --

Column 6, line 62, "66d , . . . , h" should read -- 66d, 66e, 66f, 66g, 66h --

Column 7, line 6, "66d , . . . , h" should read -- 66d, 66e, 66f, 66g, 66h --

Column 7, line 11, "66d , . . . , h" should read -- 66d, 66e, 66f, 66g, 66h --

Column 7, line 12, "66d , . . . , h" should read -- 66d, 66e, 66f, 66g, 66h --

Column 7, line 32, "10a, b" should read -- 10a, 10b --

Column 7, line 38, "4A, B" should read -- 4A, 4B --

Column 7, lines 59-60, "51, 53" should read -- 51, 52, 53 --

Column 7, line 60, "61, . . . , 63" should read -- 61, 62, 63 --

Column 8, line 17, "90a, b" should read -- 90a, 90b --

Column 8, line 18, "91a, b, . . . , 98a, b" should read -- 91a, 91b, 92a, 92b, 93a, 93b, 94a, 94b, 95a, 95b, 96a, 96b, 97a, 97b, 98a, 98b --

Column 8, line 19, "91, . . . , 98" should read -- 91, 92, 93, 94, 95, 96, 97, 98 --

Column 8, line 20, "99a, b" should read -- 99a, 99b --

Column 8, line 22, "91, . . . , 98" should read -- 91, 92, 93, 94, 95, 96, 97, 98 --

Column 8, line 27, "91, . . . , 98" should read -- 91, 92, 93, 94, 95, 96, 97, 98 --

Column 8, line 29, "91, . . . , 98" should read -- 91, 92, 93, 94, 95, 96, 97, 98 --

Column 8, line 53, "the electrical" should read -- the electrical length (Ielec) --

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,274,331 B2
APPLICATION NO. : 10/502413
DATED : September 25, 2007
INVENTOR(S) : Markus Heiniger et al.

Page 5 of 5

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 8, line 54, "the mechanical length" should read -- the mechanical length (Imech) --

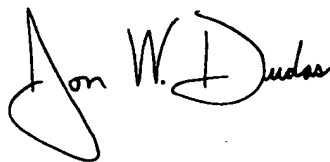
Column 8, line 55, "the electrical length is proportional to the phase:" should read -- the electric length (Ielec) is proportional to the phase (Φ): --

Column 8, after the equation on line 60, insert the following:

-- where ϵ_r = permittivity of the line; and
 λ = wavelength. --

Signed and Sealed this

Sixth Day of May, 2008.

A handwritten signature in black ink, reading "Jon W. Dudas". The signature is stylized, with a large loop for the "J" and a cursive "Dudas".

JON W. DUDAS
Director of the United States Patent and Trademark Office